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PREFACE

The National and International Conference on “Shaping the Future of Education,” held on 1 April 2026, brings together educators, researchers, policymakers, and practitioners from diverse backgrounds to explore innovative approaches and emerging trends in education. In an era marked by rapid technological advancement, shifting societal needs, and global interconnectedness, education systems must continuously adapt to prepare learners for the challenges and opportunities of the future.

This conference serves as a platform for the exchange of knowledge, ideas, and best practices that contribute to the transformation of education across local and global contexts. The selected papers included in these proceedings reflect a wide range of perspectives, addressing key themes such as digital learning, educational equity, curriculum innovation, teacher development, and lifelong learning.

We extend our sincere appreciation to all authors for their valuable contributions, as well as to the reviewers and organizing committee for their dedication and commitment to maintaining the academic quality of this conference. Their collective efforts have ensured that these proceedings represent meaningful and impactful scholarly work.

It is our hope that the insights presented in this volume will inspire further research, foster collaboration, and support the ongoing development of education systems that are inclusive, resilient, and forward-looking.

Conference Organizing Committee
1 April 2026

A CONSTRUCTIVIST PROCESS-ORIENTED INSTRUCTIONAL MODEL FOR DEVELOPING INNOVATIVE CREATIVITY SKILLS IN ELEMENTARY SOCIAL STUDIES

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Abstract

This study aimed to develop a constructivist process-oriented instructional model for developing innovative creativity skills in elementary social studies. The study employed a research and development (R&D) approach consisting of three phases: needs analysis, model design and development, and expert evaluation. Data were collected through document analysis, interviews with teachers and students, and expert review of the proposed model.

The findings indicate that the developed instructional model consists of a five-stage learning process: Understanding, Prioritization, Innovation Planning, Implementation, and Evaluation. The model is grounded in constructivist learning theory and integrates activity-based learning, collaborative learning, and reflective practices. In addition, the model incorporates a multidimensional framework of innovative creativity skills, including creativity and innovation, creative collaboration, innovation development, and communication.

To support implementation, a comprehensive assessment system was developed, including an achievement test, an innovative creativity skills assessment form, and a student satisfaction questionnaire. The results of expert evaluation suggest that the model demonstrates a high level of appropriateness, coherence, and feasibility for use in elementary social studies classrooms.

Overall, the study contributes to instructional design by providing a structured and theoretically grounded model that aligns learning processes with innovation-oriented competencies. The model offers practical guidance for designing learner-centered learning environments that support the development of innovative creativity skills in elementary education.

Keywords

Constructivist Learning; Instructional Model Development; Activity-Based Learning; Innovative Creativity Skills; Social Studies Education; Elementary Education

Introduction

In the context of rapid social, economic, and technological change, education systems are increasingly expected to prepare learners with competencies that extend beyond content knowledge. Among these, innovative creativity skills-encompassing idea generation, collaboration, innovation development, and communication-have been identified as essential for navigating complex and dynamic environments. International policy frameworks, such as those proposed by the Organization for Economic Co-operation and Development, emphasize the importance of developing learners' capacity to create new value, solve complex problems, and engage in responsible decision-making (OECD, 2019, 2024). Similarly, the Program for International Student Assessment (PISA) has expanded its focus to include creative thinking and the application of knowledge in real-world contexts (OECD, 2024a, 2024b).

Despite these policy directions, classroom practices in many contexts continue to emphasize content transmission and memorization. Such approaches may limit opportunities for learners to engage in higher-order thinking, creativity, and collaborative problem-solving. This challenge is particularly evident in elementary social studies education, where instruction often prioritizes factual knowledge over inquiry, analysis, and application. As a result, learners may have limited opportunities to develop innovative creativity skills that are essential for understanding and addressing real-world social issues.

To address these limitations, there has been increasing interest in learner-centered pedagogical approaches, particularly those grounded in constructivist learning theory. Constructivism posits that learners actively construct knowledge through interaction with their environment, engagement in meaningful activities, and reflection on their experiences (Piaget, 1970; Vygotsky, 1978). Instructional approaches such as activity-based learning, inquiry-based learning, and collaborative learning are consistent with this perspective and have been shown to support deeper understanding and higher-order thinking.

However, while these approaches offer valuable pedagogical insights, their implementation in classroom practice often lacks systematic structure. Teachers may encounter difficulties in designing coherent learning processes that effectively integrate multiple strategies and align them with targeted competencies. This highlights the need for instructional models that provide clear, structured, and theoretically grounded frameworks for practice.

In addition, the development of innovative creativity skills requires not only appropriate learning activities but also aligned assessment systems. Traditional assessment methods, which focus primarily on recall and comprehension, may not adequately capture learners' abilities in creativity, collaboration, and innovation. Therefore, instructional design must incorporate assessment approaches that reflect the multidimensional nature of these competencies.

Given these challenges, there is a need for a process-oriented instructional model that integrates constructivist principles with structured learning stages and aligned assessment strategies. Such a model should support learners in engaging with real-world problems, developing innovative solutions, and reflecting on their learning processes.

Therefore, this study aims to develop a constructivist process-oriented instructional model for developing innovative creativity skills in elementary social studies. The study focuses on designing a theoretically grounded and practically applicable model that aligns learning processes, activities, and assessment with innovation-oriented competencies.

2. Literature Review

2.1 Innovative Creativity Skills in Contemporary Education

Innovative creativity skills have become a central focus in contemporary education due to increasing global demands for adaptability, problem-solving, and knowledge creation. These skills extend beyond traditional notions of creativity by integrating cognitive, social, and practical dimensions, including idea generation, collaboration, innovation development, and communication (Beghetto, 2021; Henriksen et al., 2020).

International frameworks have emphasized the importance of such competencies. For example, the Organization for Economic Co-operation and Development Learning Compass 2030 highlights learners' ability to create new value, reconcile tensions, and take responsibility as key transformative competencies (OECD, 2019, 2024). Similarly, the Program for International Student Assessment (PISA) has expanded its scope to include creative thinking and the application of knowledge in unfamiliar contexts (OECD, 2024a, 2024b). Recent studies further indicate that creativity and innovation are critical predictors of learners' readiness for future work and societal participation (World Economic Forum, 2023; Lucas & Spencer, 2022).

From a theoretical perspective, innovative creativity skills can be understood as a multidimensional construct involving both individual cognitive processes and social interaction. Creativity involves generating novel and useful ideas, while innovation requires the implementation and refinement of these ideas in practical contexts (Runco & Jaeger, 2012; OECD, 2022). Collaboration and communication further support the co-construction and dissemination of knowledge (Henriksen et al., 2020).

Despite their importance, these competencies are often insufficiently developed in classroom settings, where instructional practices may emphasize memorization and standardized assessment (Voogt & Roblin, 2019; Care et al., 2021). This gap highlights the need for instructional approaches that explicitly target innovative creativity skills through structured and meaningful learning processes.

2.2 Constructivist Learning Theory

Constructivist learning theory provides a foundational framework for designing instructional approaches that support innovative creativity. According to constructivist perspectives, knowledge is actively constructed by learners through interaction with their environment rather than passively received from instructors (Piaget, 1970; Vygotsky, 1978).

Contemporary interpretations of constructivism emphasize the importance of social interaction, scaffolding, and contextual learning in supporting higher-order thinking (Schunk, 2020; Fosnot & Perry, 2021). Research indicates that constructivist learning environments can significantly enhance students' problem-solving abilities, creativity, and metacognitive skills (Hmelo-Silver & Eberbach, 2021).

In addition, constructivist theory highlights the role of reflection in learning. Reflective practices enable learners to evaluate their understanding, identify gaps, and refine their ideas, which are essential processes in innovation development (Schön, 1983; Panadero, 2021).

Recent studies also suggest that constructivist approaches are particularly effective when combined with technology-enhanced learning environments, which can provide interactive, adaptive, and collaborative learning experiences (Holmes et al., 2022).

2.3 Activity-Based and Process-Oriented Learning Approaches

Activity-based learning (ABL) is a learner-centered pedagogical approach that aligns closely with constructivist principles. In ABL environments, learners actively engage in tasks such as inquiry, problem-solving, collaboration, and reflection, which may support deeper understanding and skill development (Prince, 2004; Freeman et al., 2014).

Recent meta-analyses confirm that active learning strategies significantly improve student engagement and higher-order thinking outcomes across disciplines (Theobald et al., 2020; Deslauriers et al., 2019). In social studies education, ABL enables learners to explore real-world issues, evaluate multiple perspectives, and develop informed decisions (Levstik & Barton, 2015).

Process-oriented learning further enhances ABL by providing structured stages that guide learners through cognitive and creative processes. Such structured approaches have been shown to improve learning coherence and support the development of complex skills (Reigeluth et al., 2020).

Moreover, integrating inquiry-based, problem-based, and project-based learning within a unified framework has been identified as an effective strategy for fostering innovation and creativity (Bell, 2010; Hmelo-Silver, 2004). However, many existing approaches lack clearly defined instructional models that systematically integrate these elements.

2.4 Instructional Model Development

Instructional models provide systematic frameworks for organizing teaching and learning processes. According to Joyce et al. (2015), instructional models define key elements such as learning stages, teacher and learner roles, social systems, and support systems.

Recent research emphasizes that effective instructional models for 21st-century learning should integrate:

- learner-centered pedagogies
- structured learning processes
- alignment between objectives, activities, and assessment
- opportunities for feedback and reflection (Reigeluth et al., 2020; Merrill, 2020)

In the context of innovative creativity, instructional models must support both ideation and implementation processes. This requires the integration of cognitive, social, and practical learning experiences within a coherent structure.

However, studies indicate that many existing models in elementary education remain fragmented and lack alignment between theory and classroom practice (Voogt et al., 2018; Care et al., 2021). This highlights the need for models that explicitly integrate constructivist principles with process-oriented learning design.

2.5 Assessment of Innovative Creativity Skills

Assessment plays a critical role in supporting and evaluating learning processes. Traditional assessment methods, which emphasize recall and comprehension, are insufficient for measuring complex competencies such as creativity and innovation (Brookhart, 2013).

Contemporary assessment approaches emphasize formative assessment and performance-based evaluation, including observation, project work, peer assessment, and reflective practices (Black & Wiliam, 2021). These approaches align with the principles of Assessment for Learning (AfL), which focus on using assessment to support ongoing learning.

Recent studies suggest that multidimensional assessment frameworks are necessary for capturing innovation-related competencies, including creativity, collaboration, and problem-solving (Care & Vista, 2017; Lucas & Spencer, 2022). In addition, student perception and satisfaction are increasingly recognized as important indicators of instructional effectiveness (Kember & Ginns, 2012).

2.6 Synthesis and Research Gap

The literature reviewed highlights several key points. First, innovative creativity skills are essential competencies emphasized in global frameworks such as those of the Organization for Economic Co-operation and Development and PISA. Second, constructivist and activity-based learning approaches provide strong theoretical foundations for developing these skills. Third, structured instructional models are necessary to ensure coherence between learning processes and outcomes. Fourth, assessment systems must be multidimensional and aligned with targeted competencies.

However, despite these developments, there remains a lack of integrated instructional models that systematically combine constructivist principles, process-oriented learning stages, and

multidimensional assessment frameworks within elementary social studies contexts. Existing approaches are often fragmented and lack coherence between theory, instruction, and assessment.

Therefore, this study addresses this gap by developing a constructivist process-oriented instructional model that integrates these elements into a coherent framework. The model aims to align learning processes, activities, and assessment with the development of innovative creativity skills in elementary education.

3. Methodology

3.1 Research Design

This study employed a research and development (R&D) approach to design and develop a constructivist process-oriented instructional model aimed at developing innovative creativity skills in elementary social studies. The R&D approach is appropriate for studies that focus on the systematic design, development, and validation of instructional innovations grounded in both theory and empirical evidence (Richey & Klein, 2007).

For Objective 1, the study focused specifically on the model development phase, which involved analyzing contextual needs, synthesizing theoretical foundations, and constructing the instructional model. This phase aimed to ensure that the model is both theoretically grounded and contextually relevant for elementary social studies classrooms.

3.2 Model Development Process

The development of the instructional model was conducted in three main steps:

3.2.1 Needs Analysis

The needs analysis aimed to examine current instructional practices and identify gaps related to the development of innovative creativity skills.

- Document Analysis
Curriculum documents, policy frameworks, and relevant literature on innovative creativity, constructivist learning, and social studies education were analyzed to establish a theoretical foundation for model development.
- Interviews
Semi-structured interviews were conducted with teachers and students to explore existing classroom practices, challenges, and learning needs. The interview data provided insights into limitations of current instruction, particularly in relation to learner engagement, problem-solving opportunities, and creativity development.

The findings from this step were used to inform the design of the instructional model.

3.2.2 Model Design and Development

Based on the results of the needs analysis and theoretical synthesis, the instructional model was designed and developed.

- Theoretical Integration
The model integrates principles from:
 - Constructivist learning theory
 - Activity-based learning
 - Process-oriented instructional design
- Model Structure
The developed instructional model consists of five sequential stages:
 - Understanding
 - Prioritization

- Innovation Planning
- Implementation
- Evaluation

These stages represent a structured learning process that guides learners from problem identification to innovation development and reflective improvement.

- Instructional Components

In addition to the learning process, the model includes:

- Learning activities based on real-world contexts
- Collaborative learning environments
- Reflective learning processes
- Integrated assessment strategies

- Lesson Plan Development

Six lesson plans were developed based on the social studies economics strand (Goods and Services), ensuring alignment between instructional activities and targeted innovative creativity skills.

3.2.3 Expert Validation

The developed instructional model was evaluated by five experts in curriculum and instruction, social studies education, and educational measurement.

- Selection of Experts

Experts were selected using purposive sampling based on their academic qualifications and professional experience.

- Evaluation Criteria

The model was assessed using an evaluation form based on the standards of the Joint Committee on Standards for Educational Evaluation, including:

- Utility
- Feasibility
- Propriety
- Accuracy

- Content Validity

The Index of Item-Objective Congruence (IOC) was used to examine the alignment between model components and learning objectives.

- Revision

Feedback from experts was used to refine the model, particularly in terms of clarity of instructional stages, alignment of activities with skills, and assessment design.

3.3 Participants

The participants involved in the model development phase included:

- Experts (n = 5)

Five experts participated in the evaluation of the instructional model.

- Teachers and Students
Elementary social studies teachers and students participated in the needs analysis phase through interviews, providing contextual data for model development.

3.4 Research Instruments

The study employed multiple instruments to support the model development process:

- Document Analysis Form
Used to analyze curriculum documents, policy frameworks, and relevant literature.
- Semi-Structured Interview Protocols
Used to collect qualitative data from teachers and students regarding instructional practices and learning needs.
- Model Evaluation Form
A Likert-scale questionnaire used by experts to evaluate the quality of the instructional model based on four criteria (utility, feasibility, propriety, and accuracy).

3.5 Data Analysis

Data analysis in the model development phase included both qualitative and quantitative methods:

- Content Analysis
Qualitative data from document analysis and interviews were analyzed to identify themes and inform model design (Krippendorff, 2018).
- Descriptive Statistics
Quantitative data from expert evaluation were analyzed using mean (M) and standard deviation (SD) to determine the level of agreement.
- Content Validity Analysis
IOC values were calculated to assess the alignment between model components and objectives.
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4. Results

4.1 Results of Needs Analysis

The results of the needs analysis, derived from document analysis and semi-structured interviews with teachers and students, revealed several critical issues in current social studies instruction.

First, instructional practices were found to be predominantly content-centered and teacher-directed, with limited opportunities for students to engage in higher-order thinking, problem-solving, or innovation-related tasks. Learning activities often emphasize knowledge recall rather than the application and creation of knowledge.

Second, although creativity was recognized as an important learning outcome, systematic instructional processes to develop innovative creativity skills were largely absent. Teachers reported a lack of structured models that could guide students from idea generation to innovation development.

Third, assessment practices were found to focus mainly on academic achievement, with limited tools specifically designed to assess innovative creativity skills in a comprehensive manner. This gap highlighted the need for a multidimensional assessment framework.

These findings informed the development of a structured instructional model that integrates process-oriented learning and authentic assessment.

4.2 Development of the Instructional Model

Based on the synthesis of theoretical foundations and needs analysis, a social studies learning management model to promote innovative creativity skills was developed.

4.2.1 Model Structure

The developed model consists of five sequential stages, forming a continuous learning process:

1. Understanding
Learners explore real-world contexts and construct foundational knowledge related to goods and services.
2. Prioritization
Learners identify problems or needs within the context and determine priorities for innovation.
3. Innovation Planning
Learners generate ideas and design innovative solutions collaboratively.
4. Implementation
Learners develop and apply their innovations through hands-on activities.
5. Evaluation
Learners reflect on their work, evaluate outcomes, and improve their innovations.

These stages emphasize a constructivist and process-based approach, enabling learners to actively construct knowledge and develop innovation through iterative learning.

4.2.2 Instructional Components

The model incorporates the following key components:

- Learning Content
Focused on the economics strand: *Goods and Services*, aligned with Grade 6 curriculum standards.
- Learning Activities
Activity-based and collaborative learning tasks designed to promote problem-solving, idea generation, and innovation development.
- Learning Environment
A learner-centered environment that encourages interaction, discussion, and knowledge sharing.
- Assessment and Evaluation
Integrated formative and summative assessment strategies aligned with innovative creativity skills.

4.2.3 Assessment Framework for Innovative Creativity Skills

A key outcome of the model development phase is the design of an assessment framework for innovative creativity skills.

The assessment instrument consists of four domains, each with five indicators:

1. Creativity and Innovation
2. Creative Collaboration with Others
3. Innovation Development
4. Communication and Collaboration

Each domain includes behavioral indicators such as idea generation, collaborative interaction, innovation planning, and reflective improvement .

The assessment uses a 5-point rating scale ranging from weak (1) to excellent (5), enabling both formative and summative evaluation of students' innovative creativity skills.

4.2.4 Development of Learning Materials

The development of learning materials in this study was systematically designed to ensure alignment with the instructional model, targeted learning outcomes, and real-world applicability. The process involved the creation of six structured lesson plans, each corresponding to key topics within the economics strand on *Goods and Services* at the primary education level.

(1) Design of Lesson Plans Based on the Instructional Model

Each lesson plan was explicitly structured according to the five stages of the instructional model, ensuring coherence and continuity across the learning process. Specifically:

- In the Understanding stage, lesson activities were designed to activate prior knowledge and introduce real-world economic contexts, such as production processes and consumer behavior.
- The Prioritization stage guided students to identify problems or needs within given contexts, encouraging analytical thinking and decision-making.
- During the Innovation Planning stage, students engaged in idea generation and collaborative design of solutions, fostering creativity and divergent thinking.
- The Implementation stage emphasized hands-on activities, where students applied their ideas to create tangible outputs or simulated innovations.
- Finally, in the Evaluation stage, students reflected on their learning, assessed their work, and improved their solutions through feedback and self-assessment.

This structured integration ensured that each lesson did not function as an isolated activity but as part of a continuous and iterative learning cycle that supports innovation development.

(2) Alignment with Innovative Creativity Skills

The lesson plans were intentionally designed to promote the four domains of innovative creativity skills identified in this study, namely:

- Creativity and Innovation
- Creative Collaboration with Others
- Innovation Development
- Communication and Collaboration

Learning activities within each lesson were mapped to these domains to ensure that students had opportunities to:

- Generate and refine ideas
- Work collaboratively with peers
- Develop and implement innovative solutions
- Communicate and reflect on their learning processes

For example, group-based tasks and problem-solving activities were embedded to promote collaboration, while reflective discussions and presentations supported

communication skills. This alignment ensured that instructional practices directly contributed to the development of measurable competencies.

(3) Integration of Authentic Learning Contexts

To enhance relevance and engagement, all lesson plans incorporated authentic learning contexts drawn from students' daily lives and community environments. These contexts included:

- Local production and consumption practices
- Community-based goods and services
- Real-world economic decision-making scenarios

Such contextualization allowed students to connect theoretical knowledge with practical applications, thereby promoting meaningful learning and facilitating the transfer of knowledge to real-life situations.

(4) Development of the Achievement Test

In addition to instructional materials, an achievement test was developed to assess students' academic understanding of economic concepts.

The test consisted of multiple-choice items covering key topics, including:

- Production of goods and services
- Roles of producers and consumers
- Factors of production
- Market structures and consumer decision-making

Each item was designed to measure different cognitive levels, ranging from recall and understanding to higher-order thinking such as analysis, evaluation, and creation. This design ensured that the assessment aligned with both content knowledge and cognitive skill development.

The structure and content of the test items reflect authentic curriculum standards and real-world applications of economic principles, as evidenced by questions addressing production processes, consumer rights, and market behavior.

(5) Instructional Coherence and Assessment Alignment

A key strength of the developed learning materials lies in their constructive alignment, where:

- Learning objectives
- Instructional activities
- Assessment methods

are systematically interconnected.

The lesson plans promote innovative creativity skills through process-based learning, while the achievement test evaluates students' conceptual understanding of economics. Together, these components provide a comprehensive framework for assessing both process skills (innovation and creativity) and content knowledge (economics concepts).

Overall, the development of learning materials resulted in a coherent set of instructional resources that:

- Operationalize the instructional model into classroom practice
- Support the development of innovative creativity skills
- Integrate authentic and meaningful learning experiences

- Provide valid tools for assessing academic achievement

These materials serve as a critical foundation for the subsequent implementation and evaluation phases of the study.

4.2.5 Student Satisfaction Measurement Design (Expanded Explanation)

To ensure a comprehensive evaluation of the developed instructional model, a student satisfaction questionnaire was systematically designed as an integral component of the research. This instrument aims to capture learners' perceptions of the learning experience and to provide supportive evidence regarding the effectiveness of the model in fostering innovative creativity skills.

(1) Conceptual Basis of the Instrument

The design of the questionnaire is grounded in the principle that learner satisfaction reflects both instructional quality and learning outcomes, particularly in learner-centered and constructivist environments. Satisfaction is considered an important indicator of:

- Instructional clarity and relevance
- Engagement in learning activities
- Perceived fairness of assessment
- Perceived benefits in skill development

Thus, the instrument was structured to align directly with the core components of the instructional model.

(2) Structure of the Questionnaire

The questionnaire consists of four dimensions, each representing a critical component of the learning management process:

1. Content

This dimension evaluates the quality and appropriateness of instructional content, including clarity, alignment with objectives, and suitability for students' cognitive levels.

Example indicators include:

- Clarity and comprehensibility of content
- Alignment between content and learning objectives
- Appropriateness for students' abilities
- Level of interest and engagement generated

These indicators reflect whether the instructional model successfully delivers meaningful and accessible knowledge.

2. Learning Activities

This dimension focuses on students' experiences with classroom activities designed under the instructional model.

Key aspects include:

- Variety and diversity of activities
- Alignment with lesson objectives
- Opportunities for hands-on and experiential learning
- Promotion of collaboration and teamwork

The emphasis is placed on whether activities facilitate active learning and engagement, which are essential for developing innovative creativity skills .

3. Assessment and Evaluation

This dimension examines students' perceptions of the assessment processes embedded in the model.

It includes:

- Clarity of assessment criteria
- Appropriateness of assessment methods
- Alignment between assessment and learning objectives
- Fairness and transparency of evaluation

This ensures that assessment is not only evaluative but also supportive of learning and skill development, consistent with formative assessment principles.

4. Learning Benefits

This dimension captures students' perceived outcomes of the learning experience.

Indicators include:

- Improved understanding of content
- Ability to apply knowledge in real-life contexts
- Development of analytical and problem-solving skills
- Enhancement of teamwork and collaboration
- Promotion of creativity and innovation

This dimension directly reflects the impact of the instructional model on innovative creativity skills development .

(3) Measurement Scale

All items in the questionnaire are measured using a 5-point Likert scale, defined as follows:

- 5 = Very High Satisfaction
- 4 = High Satisfaction
- 3 = Moderate Satisfaction
- 2 = Low Satisfaction
- 1 = Very Low Satisfaction

This scaling approach allows for:

- Quantitative analysis of student perceptions
- Comparison across dimensions
- Identification of strengths and areas for improvement

(4) Data Collection and Interpretation

Students are instructed to respond based on their actual learning experiences without concern for grading consequences, ensuring authentic and unbiased responses.

The collected data can be analyzed using:

- Mean and standard deviation
- Descriptive interpretation based on satisfaction levels
- Comparative analysis across dimensions

High satisfaction scores indicate that the instructional model is effective in:

- Delivering meaningful content
- Engaging students in active learning
- Supporting fair and aligned assessment
- Enhancing innovative creativity skills

(5) Role of Satisfaction Data in the Study

The student satisfaction data serves multiple purposes:

1. Validation of the instructional model from the learner perspective
2. Triangulation with achievement and creativity skill outcomes
3. Identification of practical strengths and implementation challenges

Importantly, satisfaction results complement cognitive and skill-based outcomes, providing a holistic evaluation of the instructional model.

4.3 Results of Expert Validation

The developed instructional model and its associated components were evaluated by a panel of five experts in the fields of curriculum and instruction, social studies education, and educational measurement. The purpose of this evaluation was to examine the quality, appropriateness, and internal coherence of the model prior to implementation.

Table 1 Evaluation of the Instructional Model by Experts (n = 5)

Evaluation Dimension	Mean (M)	SD	Interpretation
Utility	4.72	0.38	Highest
Feasibility	4.65	0.41	Highest
Propriety	4.68	0.36	Highest
Accuracy	4.70	0.39	Highest
Overall	4.69	0.39	Highest

Note. Ratings were based on a 5-point Likert scale (1 = Lowest, 5 = Highest).

The results of expert evaluation indicated that the developed instructional model was rated at a high level across all dimensions. The overall mean score was $M = 4.69$ ($SD = 0.39$), indicating a high level of appropriateness.

Among the evaluated dimensions, utility received the highest mean score ($M = 4.72$, $SD = 0.38$), suggesting that the model is perceived as highly relevant and beneficial for instructional practice. The dimensions of accuracy ($M = 4.70$, $SD = 0.39$), propriety ($M = 4.68$, $SD = 0.36$), and feasibility ($M = 4.65$, $SD = 0.41$) were also rated at high levels, indicating that the model is theoretically sound, appropriate for educational contexts, and practical for classroom implementation.

Overall, the findings suggest that the instructional model demonstrates strong quality in terms of design, alignment, and applicability.

4.3.1 Evaluation Framework

The evaluation was conducted using criteria based on the standards of the Joint Committee on Standards for Educational Evaluation, which include four key dimensions:

1. Utility – the extent to which the model is useful and relevant for instructional practice
2. Feasibility – the practicality of implementing the model in real classroom settings
3. Propriety – the appropriateness of the model in terms of ethics and educational standards
4. Accuracy – the degree to which the model is theoretically sound and internally consistent

Each dimension was assessed using a Likert-scale evaluation form, allowing experts to provide both quantitative ratings and qualitative feedback.

4.3.2 Evaluation of Model Structure and Learning Process

The results of the expert review indicated that the five-stage instructional process (Understanding, Prioritization, Innovation Planning, Implementation, and Evaluation) was perceived as:

- Systematic and logically sequenced, supporting a clear progression of learning
- Aligned with constructivist and activity-based learning principles
- Suitable for promoting innovative creativity skills through real-world problem engagement

Experts emphasized that the process structure effectively supports the transition from knowledge construction to innovation development and reflective improvement. The iterative nature of the stages was also highlighted as beneficial for reinforcing learning and continuous skill development.

4.3.3 Evaluation of Instructional Components

The instructional components of the model—including content, learning activities, learning environment, and assessment—were evaluated as coherent and well-integrated.

- The learning content was considered appropriate for the elementary social studies curriculum, particularly within the economics strand (Goods and Services).
- The learning activities were recognized as diverse and capable of promoting active engagement, collaboration, and problem-solving.
- The learning environment was evaluated as supportive of interaction and learner-centered participation.
- The assessment system was identified as aligned with both instructional processes and targeted innovative creativity skills.

Overall, experts noted that the model demonstrates a strong alignment between objectives, activities, and assessment, which is essential for effective instructional design.

4.3.4 Evaluation of Assessment Instruments

The assessment instruments developed in this study—including the achievement test, innovative creativity skills assessment, and student satisfaction questionnaire—were evaluated as appropriate and comprehensive.

- The achievement test was considered consistent with curriculum standards and capable of measuring multiple cognitive levels
- The innovative creativity skills assessment was recognized as multidimensional, covering creativity, collaboration, innovation development, and communication
- The student satisfaction questionnaire was evaluated as relevant for capturing learners' perceptions across key aspects of the instructional model

In addition, the use of a 5-point rating scale and clearly defined indicators was considered appropriate for ensuring consistency and clarity in assessment.

4.3.5 Content Validity (IOC Results)

Content validity of the model components and assessment instruments was examined using the Index of Item-Objective Congruence (IOC).

The IOC results ranged from 0.80 to 1.00, indicating a high level of agreement among experts regarding the alignment between:

- instructional objectives
- learning activities
- assessment indicators

These results suggest that the developed model and its instruments demonstrate strong content validity and are consistent with the intended learning outcomes.

4.3.6 Expert Feedback and Model Refinement

Qualitative feedback from experts provided valuable insights for refining the instructional model. Key suggestions included:

- Clarifying the descriptions of each instructional stage to improve usability for teachers
- Strengthening the alignment between learning activities and innovative creativity skill domains
- Enhancing assessment criteria to better reflect innovation processes
- Improving the clarity of evaluation indicators in the assessment instruments

Based on these recommendations, revisions were made to enhance the clarity, coherence, and applicability of the model.

4.3.7 Summary of Expert Validation Results

In summary, the expert validation results indicate that:

- The instructional model demonstrates high levels of utility, feasibility, propriety, and accuracy
- The five-stage process provides a clear and systematic framework for learning management
- The instructional components and assessment system are well-aligned and comprehensive

- The model and its instruments show strong content validity (IOC = 0.80–1.00)
- Revisions based on expert feedback improved the overall quality and usability of the model

These findings suggest that the developed instructional model is appropriate for use in elementary social studies classrooms and provides a theoretically grounded and practically applicable framework for promoting innovative creativity skills.

In summary, the results of Objective 1 indicate that:

- A constructivist process-oriented instructional model consisting of five stages was successfully developed.
- The model integrates learning activities, assessment, and learning environments to promote innovative creativity skills.
- Supporting materials, including lesson plans, achievement tests, and assessment instruments, were systematically developed.
- The model was validated by experts and found to be highly appropriate for implementation in elementary social studies classrooms.

5. Discussion

5.1 Alignment with Global Competency Frameworks

The findings of this study suggest that the developed instructional model is aligned with global educational priorities emphasizing innovation-oriented competencies. Frameworks proposed by the Organisation for Economic Co-operation and Development, particularly the Learning Compass 2030, highlight the importance of learners' ability to create new value, engage in problem-solving, and apply knowledge in complex contexts (OECD, 2019, 2024). Similarly, the Programme for International Student Assessment (PISA) emphasizes creative thinking and real-world application of knowledge as key competencies for the twenty-first century (OECD, 2024a, 2024b).

The five-stage instructional process identified in this study—Understanding, Prioritization, Innovation Planning, Implementation, and Evaluation—reflects these competencies by guiding learners through structured processes of problem identification, analysis, solution design, and reflective improvement. The integration of real-world contexts within the learning activities further aligns with PISA's emphasis on authentic problem-solving.

These findings indicate that the developed model provides a practical mechanism for translating global competency frameworks into classroom-level instructional design.

5.2 Constructivist and Process-Oriented Foundations

The instructional model developed in this study is grounded in constructivist learning theory, which emphasizes active knowledge construction through interaction, experience, and reflection. The results demonstrate that the model incorporates key elements of constructivist learning, including learner-centered activities, collaborative interaction, and reflective processes.

The structured five-stage process further reflects a process-oriented learning approach, enabling learners to progress systematically from understanding problems to developing and refining innovative solutions. This structured progression supports both cognitive and metacognitive development, particularly in relation to higher-order thinking.

The findings are consistent with prior research indicating that constructivist and activity-based learning approaches can support deeper learning and creativity when implemented through coherent instructional processes (Hmelo-Silver & Eberbach, 2021; Reigeluth et al., 2020).

5.3 Integration of Active Learning Approaches

The developed instructional model integrates multiple active learning approaches, including inquiry-based learning, problem-based learning, and collaborative learning. Rather than treating these approaches as separate strategies, the model embeds them within a unified process. For example:

- The Understanding stage supports inquiry-based exploration
- The Prioritization stage reflects problem-based analysis
- The Innovation Planning and Implementation stages align with project-based learning
- The Evaluation stage supports reflective learning

This integration provides a continuous learning trajectory that supports sustained engagement and deeper cognitive processing. The findings suggest that combining these approaches within a structured framework may enhance their effectiveness in promoting innovative creativity skills.

5.4 Alignment Between Instructional Processes and Assessment

A key contribution of this study is the alignment between instructional processes and assessment systems. The results indicate that the developed model integrates assessment as an essential component of the learning process rather than as a separate activity.

The innovative creativity skills assessment, which includes four domains-creativity and innovation, creative collaboration, innovation development, and communication-reflects the multidimensional nature of the targeted competencies . In addition, the achievement test measures cognitive learning outcomes across multiple levels , while the student satisfaction questionnaire captures learners' perceptions of the learning experience .

This alignment ensures coherence between learning objectives, instructional activities, and assessment methods, which is essential for effective competency development.

5.5 Interpretation of Expert Validation Results

The results of expert evaluation indicate that the developed instructional model demonstrates a high level of appropriateness across all evaluation dimensions, including utility, feasibility, propriety, and accuracy.

The high ratings suggest that the model is perceived as:

- Relevant and useful for instructional practice
- Practical for classroom implementation
- Consistent with educational standards
- Theoretically sound and internally coherent

These findings are supported by the strong content validity results (IOC = 0.80–1.00), indicating alignment between model components and intended learning objectives.

However, it is important to interpret these findings within the scope of the study. The expert evaluation reflects professional judgments regarding the quality of the model, but does not provide empirical evidence of its effectiveness in improving student learning outcomes. Further research is therefore needed to examine the impact of the model in actual classroom settings.

5.6 Implications for Elementary Social Studies Education

The findings of this study have several implications for elementary social studies education.

First, the study demonstrates that social studies can be used as a meaningful context for developing innovative creativity skills. By engaging learners with real-world issues related to goods and services, the model supports the application of knowledge in practical contexts.

Second, the model provides teachers with a structured framework for implementing learner-centered and activity-based instruction. This may help address challenges associated with translating theoretical approaches into classroom practice.

Third, the integration of assessment within the instructional process highlights the importance of using diverse and aligned assessment methods to support learning.

5.7 Limitations and Future Research

Despite its contributions, this study has several limitations.

First, the study focuses primarily on the development and expert validation of the instructional model. While the model demonstrates high levels of appropriateness, its effectiveness in improving innovative creativity skills has not yet been empirically tested.

Second, the study is limited to a specific content area (social studies) and educational level (elementary education), which may affect the generalizability of the findings. Future research should:

- Examine the implementation of the model in classroom settings
- Investigate its effects on students' innovative creativity skills and academic achievement
- Explore its applicability across different subjects and educational levels

In conclusion, the findings suggest that the developed instructional model provides a coherent and theoretically grounded framework that aligns with global competency frameworks and supports the development of innovative creativity skills.

By integrating constructivist principles, active learning approaches, and aligned assessment systems, the model offers a structured approach to instructional design in elementary social studies. While further empirical research is needed, the study contributes to bridging the gap between educational theory and classroom practice.

6. Conclusion

This study aimed to develop a constructivist process-oriented instructional model for developing innovative creativity skills in elementary social studies. Using a research and development (R&D) approach, the study resulted in a structured instructional model grounded in constructivist theory and active learning principles.

The findings indicate that the developed model consists of a five-stage instructional process: Understanding, Prioritization, Innovation Planning, Implementation, and Evaluation. These stages provide a systematic learning pathway that supports learners in engaging with real-world problems, generating and developing innovative ideas, and reflecting on their learning processes. In addition, the model integrates key components, including activity-based learning, collaborative learning environments, and reflective practices.

A comprehensive assessment system was also developed to align with the instructional model. This includes an achievement test for measuring cognitive learning outcomes, an innovative creativity skills assessment covering four domains-creativity and innovation, creative collaboration, innovation development, and communication-and a student satisfaction questionnaire designed to capture learners' perceptions of the learning experience. Together, these components provide a multidimensional framework for evaluating both learning processes and outcomes.

The results of expert validation indicate that the instructional model demonstrates a high level of appropriateness in terms of utility, feasibility, propriety, and accuracy. These findings suggest that the model is theoretically grounded, internally coherent, and suitable for application in elementary social studies classrooms.

However, this study focuses primarily on model development and expert evaluation. Further research is needed to examine the implementation of the model in real classroom settings and to investigate its potential effects on students' innovative creativity skills and academic achievement using empirical methods.

In conclusion, the developed instructional model offers a structured and theoretically informed framework that may support the design of learner-centered and activity-based learning environments aimed at developing innovative creativity skills in elementary education.

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